

- (A) depositing a cobalt film over an entire surface of said semiconductor device formed on said semiconductor substrate,
- (B) forming a metal silicide layer on said source region, drain region and said gate electrode by performing a heat treating thereof, and
- (C) etching away an unreacted cobalt film remaining on said semiconductor substrate while leaving the metal silicide layer intact, using as an etching solution an admixture solution made of hydrochloric acid, hydrogen peroxide, and water, having relative concentration ratio thereof ranging from 1:1:5 to 3:1:5, at a solution temperature of 25 to 45°C, with an etching time of 1 to 20 minutes.

Please add new claims 2-4, reading as follows:

--2. The method as claimed in claim 1, wherein said metal silicide layer comprises a silicidized cobalt film.

3. The method according to claim 1, wherein said heat treating of step (B) is conducted at a temperature of 500°C or higher.

4. The method as claimed in claim 3, and further comprising a Step (D) of heat treating the product resulting from Step (C) at a temperature higher than a temperature of heat treating in Step (B).

5. The method as claimed in claim 4, wherein said heat treating of Step (D) is conducted at a temperature of 800°C.--

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REMARKS

The specification has been amended to correct minor clerical errors. No new matter has been entered.